



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/717,542

11/21/2003

Sung-Su Jung

8734.257.00 US

7958

30827

7590

12/07/2009

MCKENNA LONG & ALDRIDGE LLP
1900 K STREET, NW
WASHINGTON, DC 20006

EXAMINER

TADESSE, YEWEBDAR T

ART UNIT

PAPER NUMBER

1792

MAIL DATE

DELIVERY MODE

12/07/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-3, 5-9, 11, 12 and 21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In claim 1, lines 9-10; the requirement that “the radius of the syringe being larger than the distance between the dispensing start point of the neighboring image display part” is new matter. Applicants’ specification on paragraphs 40-41 and 59 teaches the diameter of the syringe being larger than the distance between the dispensing start points of the neighboring image display parts.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-3, 5-9, 11, 12 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 9; the phrase "the syringes" lacks proper antecedent basis. For the purpose of examination "the plurality of syringes" is assumed.

In claim 1, lines 13-14; the phrase "the syringes" lacks proper antecedent basis. For the purpose of examination "the plurality of syringes" is assumed.

In claim 1 lines 13-14; the phrase " the syringes at one support dispense the material on the odd image display parts and then the syringes at the support dispense the material on the even image display parts after shifting the syringe" is unclear. For the purpose of examination " the plurality of syringes at one support dispense the material on the odd image display parts and then the plurality of syringes at the other support dispense the material on the even image display parts after shifting the support"

Claim Rejections - 35 USC § 102/103

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

Art Unit: 1792

the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1-3, 5-9, 11-12 and 21 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tisone et al (US 6,063,339).

As to claim 1, Tisone et al discloses (see Fig 1-2, 6 and column 22, lines 16-31) a dispenser capable of dispensing liquid crystal on display panel comprising, a substrate on which a plurality of image display parts arranged in a plurality columns and lines; a table (112) on which the substrate is loaded; supports (502) above the table (see column 22, lines 16-33 for multiple dispensers arranged in parallel), the number of supports capable of corresponding to the number of column or line of image display parts; and a plurality of syringes (512) affixed at each support (502) to dispense a material on the substrate, wherein the supports are independently driven (see Abstract for moving head and column 22, lines 16-21 for independently provided dispensers) from each other so that one of plurality of the syringes capable of dispensing material in only one of the plurality of image display parts, wherein the plurality of syringes at one support capable of dispensing the material on the odd image display parts and the plurality of syringes at the other support capable of dispensing the material on the even

Art Unit: 1792

image display part after shifting the support and wherein the radius/diameter of the syringes is capable of being larger than the distance between the dispensing start points of neighboring image display parts (depending the types of substrate). In any event, it would have been an obvious matter of design choice to size radius/diameter of syringes as desired, since such a modification would have involved a mere change in the size of a component. A change of size is generally recognized as being within the ordinary level of skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

As to claim 5, in Tisone et al the table is moved in forward/backward and left/right directions (see Abstract).

Regarding claims 2-3, 6-9, 11-12 and 21, the claimed limitations are intended use of the apparatus related to the substrate and the coating material. These limitations do not add structure to the claimed apparatus.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

Art Unit: 1792

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 1-3 and 5-9, 11-12 and 21 rejected under 35 U.S.C. 103(a) as being unpatentable over applicants' admitted art (see Fig 3) in view of Tisone et al (US 6,063,339).

With respect to claim 1, applicants' admitted art discloses (see Fig 3) the claimed invention except for a plurality of supports, wherein in the admitted art the radius/diameter of the plurality of syringes capable of being larger than the distance between the dispensing start points of neighboring image display parts (depending the types of substrate). It would have been an obvious matter of design choice to include a plurality of supports, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. In any event, it is known to arrange a plurality of supports, such as Tisone et al teaches array of dispensers; (see column 22, lines 16-21) a plurality of syringes (512) affixed at each support (502), wherein the supports are independently driven (see Abstract for moving head and column 22, lines 16-21 for independently provided dispensers) from each other, the plurality syringes at one support capable of dispensing the material on the odd image display parts and the plurality of syringes at the other support capable of dispensing the material on the even

Art Unit: 1792

image display part after shifting the support. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a plurality of supports in the admitted art to provide of array dispensing having the desired pattern.

As to claim 5, in the admitted art the table is moved in forward/backward and left/right directions (see arrows in Fig 3).

Regarding claims 2-3, 6-9, 11-12 and 21, the claimed limitations are intended use of the apparatus related to the substrate and the coating material. These limitations do not add structure to the claimed apparatus.

Response to Arguments

12. Applicants' arguments filed 02/24/2009 have been fully considered but they are not persuasive.

13. It is noted that amended claim 1 does not clearly add structure to the claimed apparatus - limitations directed to method/operation of an apparatus and substrate /display parts are included in the apparatus claims. The added limitations are intended use of an apparatus. In applicants' claim 1, the positively claimed structures of an apparatus are a table, independently driven supports and a plurality of syringes affixed at each support. As explained above in the rejections Tisone et al and admitted art as modifies meet the positively claimed structure of a dispenser.

A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus shows all of the structural limitations of the claim. *Ex parte Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987) **Furthermore, "expressions relating**

Art Unit: 1792

the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim.” Ex parte Thibault, 164 USPQ 666,667 (Bd. App. 1969). Thus, the “inclusion of material or article worked upon does not impart patentability to the claims.” In re Young, 75 F.2d 966, 25 USPQ 69 (CCPA 1935) (as restated in In re Otto, 312 F.2d 937, 136 (USPQ 458, 459 (CCPA 1963)).

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YEWEBDAR T. TADESSE whose telephone number is (571)272-1238. The examiner can normally be reached on Monday-Friday 8:00 AM - 4:30 PM.

Art Unit: 1792

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Yewebdar T Tadesse/
Primary Examiner, Art Unit 1792